The Knowledge Bank at The Ohio State University

Ohio State Engineer

Title: Quick Acting Brake

Issue Date: 1944-11

Publisher: Ohio State University, College of Engineering

Citation: Ohio State Engineer, vol. 28, no. 1 (November, 1944), 28.

URI: http://hdl.handle.net/1811/36114

QUICK ACTING BRAKE

A new magnetic brake, which will stop a one-eighth horsepower motor traveling at 16,000 revolutions per minute in less than six turns, has been developed by Chester I. Hall, General Electric Engineer. It promises to have wide use in the operation of equipment for the armed services but just how was not announced by the company.

"Another way of expressing the force with which this new brake works can be gained by comparison with an automobile," Mr. Hall explained. The outside edge of this rotor, moving at 16,000 rpm, is traveling at 62 miles per hour. In stopping it within six turns would be the same as bringing this mile-a-minute auto to a dead stop in 2.73 feet.

"It is called a magnetic brake but magnetism plays no part in its stopping operation. A cork shoe and friction does the trick" according to Mr. Hall. "Magnetism releases it, once the need for braking is removed."